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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/588,464	08/04/2006	Yasuyuki Dewa	1033622-000023	6700	
	21839 7590 07/11/2011 BUCHANAN, INGERSOLL & ROONEY PC			EXAMINER	
POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			WOOD, ELLEN S		
ALEXANDRIA	x, v A 22313-1404		ART UNIT PAPER NUMBER		
			1782		
			NOTIFICATION DATE	DELIVERY MODE	
			07/11/2011	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com offserv@bipc.com

	Application No.	Applicant(s)	
	10/588,464	DEWA ET AL.	
Office Action Summary	Examiner	Art Unit	
	ELLEN S. WOOD	1782	
The MAILING DATE of this communication a	ppears on the cover sheet w	ith the correspondence addre	ess
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perio Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a nd will apply and will expire SIX (6) MO ute, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this comm BANDONED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on <u>07</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ The 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal mat	·	erits is
Disposition of Claims			
4) ☑ Claim(s) 1,11,13-15,19,21 and 22 is/are pend 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1, 11, 13-15, 19, 21 and 22 is/are r 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and according a control of the specific and any objection to the specific and t	ccepted or b) objected to be drawing(s) be held in abeya ection is required if the drawing	nce. See 37 CFR 1.85(a).	, ,
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the prapplication from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in A iority documents have beer eau (PCT Rule 17.2(a)).	Application No  received in this National Sta	age
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🔲 Imaamiia	Summary /PTO 412\	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)         Paper No(s)/Mail Date     </li> </ol>	Paper No	Summary (PTO-413) s)/Mail Date Informal Patent Application 	

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## **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/07/2010 has been entered.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 11, 13-15, 19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirasawa (US 5,179,168).

In regards to claim 1, Hirasawa discloses an ionomer composition that consists of a blend comprising at least two ionomers (col. 2 lines 56-57). The blend comprises a 5-99 parts by weight of the ionomer composition and 95-1 parts by weight of a thermoplastic polymer (col. 2 lines 48-52). The ethylene/unsaturated carboxylic acid copolymers are at least partially neutralized with at least one alkali metal selected from the group consisting of potassium rubidium, and cesium (col. 2 lines 31-35). The

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ethylene/unsaturated carboxylic acids have an average acid content of 0.5 to 15 mole% (col. 2 lines 29-44). The difference of the unsaturated carboxylic acid content between ionomers is at least 2 mole% (col. 3 lines 36-41). The neutralization degree (ionization degree) by potassium is 62% or more (table 1 and table 2). A base monomer, such as an unsaturated carboxylic ester or a vinyl ester, can be included in an amount of up to about 20 mol% in the ionomer (col. 4 lines 34-37). The vinyl ester includes vinyl acetate and vinyl propionate (col. 3 lines 7-9). The thermoplastic polymer is selected from the group such as medium density polyethylene, high density polyethylene, polypropylene, poly-4-methyl-1-pentene and combinations thereof (col. 6 lines 9-23).

In regards to claim 3, Hirasawa discloses that the thermoplastic polymer can be polyolefin resins (col. 6 lines 9-10).

In regards to claims 11, Hirasawa discloses can be a single layer (col. 5 lines 63-66).

In regards to claims 13-15, Hirasawa discloses a multi-layer article that can be formed with the ionomer composition and a thermoplastic resin, a paper sheet or a metal (col. 5 lines 63-68). The thermoplastic resin can be polyolefin resins (col. 6 lines 9-10).

In regards to claims 19, 21 and 22, Hirasawa discloses that the ionomer composition can be used for a packaging film, a mat, a container, a wall paper sheet, a battery separator and the like (col. 5 lines 63-66).

#### Response to Arguments

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4. Applicant's arguments filed 06/07/2010 have been fully considered but they are not persuasive.

5. The applicant argues that Hirasawa has no disclosure of employing an ethyleneunsaturated ester (B) consisting of ethylene groups and unsaturated ester groups.

In response, the examiner would like to direct the Applicant's attention to section 2111.03 of the MPEP. The MPEP states "when the phrase 'consists of' appears in a clause of the body of a claim, rather than immediately following the preamble, it limits only the element set forth in that clause; other elements are not excluded from the claim as a whole". It is held that "the transition language comprising" allows the claim to cover all ethylene-unsaturated ester copolymers, as long as the ethylene-unsaturated ethylene copolymer contains the specific ethylene group and unsaturated ester groups recited by the claims. Therefore, Hirasawa discloses employing an ethylene unsaturated ester (B) consisting of ethylene groups and unsaturated ester groups(col. 4 lines 34-37).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ELLEN S WOOD/ Examiner, Art Unit 1782

/Rena L. Dye/ Supervisory Patent Examiner, Art Unit 1782